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09/810,956	03/16/2001	Aiko Hanyu	COS-822	7257

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EXAMINER

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ART UNIT PAPER NUMBER

1773

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/810,956
Filing Date: March 16, 2001
Appellant(s): HANYU ET AL.

Gene L. Tyler
For Appellant

MAILED
JUL 15 2005
GROUP 1700

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 02, 2005.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellants' statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 1, 6-11, 14-19, 24, 25, 28-30, 33, 35-38, and 41-42 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

JP 11-060833	Idemitsu Petrochem Co. LTD.	03-1999
EP 0 669 348	Sumitomo Chemical Company	08-1995

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6-11, 14-19, 24, 25, 28-30, 33, 35-38, and 41-42 stand rejected under 35 U.S.C. 102(b) as being anticipated by JP-11-060833.

The Japanese patent document teaches monolayer heat sealable films made from a metallocene-catalyzed propylene copolymer. The polymers are isotactic in nature and have random comonomer distributions of the comonomer. The comonomers present include those claimed and they are in the claimed amounts (1-15%).

JP-11-060833 uses a metallocene catalyst system, the same comonomers, and the same comonomer amounts.

Given the catalytic systems and the starting materials, there is reason to believe that the materials taught would have the claimed physical properties.

The applicants claim a seal initiation temperature "of less than 125 deg C", and the prior art has value of 127 °C. The comonomer content for the examples appears to be low (2.6% and 4%), and the reference clearly envisages polymers having greater amounts of comonomer.

The relationship of Comonomer Content and Sealing / Melting Temperatures:

It is well known in the art that the comonomer disrupts the crystal structure of the primary monomer and the more random the packing the lower the melting point / seal initiation temperature. This same concept is clearly conveyed by 11-060833 [0012]. Thus, higher monomer content would clearly decrease the values and put the seal initiation temperature within the claimed range.

The differences between 127 °C and 125 °C are not critical:

The melting points of polymers are not sharp so there is experimental error in the values; a two-degree melting difference is not very significant. Furthermore, the two samples are not compared to each other under the same conditions / equipment.

The appellants claim oriented films; a film going through an extruder will be oriented to some degree.

It has been held that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). When there is sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6-11, 14-19, 24, 25, 28-30, 33, 35-38, and 41-42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP-11-060833.

5. The comonomer content as discussed above is within the claimed range. The prior art examples have low comonomer content. It would have been obvious to one having ordinary skill in the art to have used higher comonomer contents, within the breath of the disclosure, for applications in which a lower melting point was desired.

6. Claims 1, 6-11, 14-19, 24, 25, 28-30, 33, 35-38, and 41-42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0-669-348 A-1 in view of JP-11-060833 or the converse.

The European patent teaches oriented films having a base layer of isotactic polypropylene and a heat sealable propylene layer made by metallocene catalysis. The patent also shows that is common in the art to use a sealable layer on a polypropylene substrate to improve the sealing properties of the film.

The Japanese document teaches random / isotactic propylene copolymers made by metallocene catalysis, which have good seal properties.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the materials taught by JP-11-0608833 as the surface layer in the films taught by EP 0-669-348 A-1, in order to produce heat sealable films. The metallocene catalyzed polypropylenes taught are functionally equivalent heat sealable materials, and this is merely the substitution of one functionally equivalent material for another.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the polymers taught by JP-11-060833 in multilayer and optionally oriented films since it is common in the art to make conventional isotactic polypropylene heat sealable by the addition of a sealable layer.

(11) Response to Argument

7. The appellants argue that the claims 1, 6-11, 14-19, 24, 25, 28-30, 33, 35-38, and 41-42 are not anticipated by JP-11-060833 under 35 U.S.C. 102(b).

8. While the appellant claim a wide range of seal initiation temperatures, the examiner is focused on the upper end of the range (125 °C). The appellant argues that the two-degree difference between the prior art and the claimed invention is significant.

- a. First, the examples of the prior art have a low comonomer content and the prior art clearly teaches that higher comonomer contents can be used. The increase in comonomer content would make the polymer have a lower seal initiation temperature.
 - b. Second, seal initiation temperature of polymers is not a sharp measurement. Polymers do not have the sharp melt characteristics of pure small organic molecules.
 - c. Third, a two-degree difference should not be considered to be significant. One must remember that these are measured quantities with no experimental error has been reported for the values. It would be scientifically irresponsible to believe the applicants value of 125 °C is clearly different from a value of 127 °C as reported in the prior art. There is no indication that these temperatures were measured under the same conditions.
9. The appellants state that a two-degree difference is significant when sealing films. This may be true, but it appears that a side-by-side comparison of the materials under exacting conditions would be necessary to elucidate these differences. It must be clear that there really is a difference.
10. The appellants argue that the catalyst systems are not the same.
11. While the catalyst systems are not identical, the same class of catalyst is used and it behaves in a similar manner. While there may be some differences in the products observed, the materials are not claimed in a way to differentiate them from the prior art. The claimed melt properties, seal initiation temperature, gloss, etc... are all characteristics of polymers produced by metallocene catalysis.
12. The appellants state that varying the amount of ethylene in the copolymer is undesirable. Please, understand that the ethylene content suggested is neither outside of the amounts claimed by the appellant nor the amount suggested by the reference.

13. The appellants argue that the claims 1, 6-11, 14-19, 24, 25, 28-30, 33, 35-38, and 41-42 are not obvious over JP-11-060833 under 35 U.S.C. 103(a).

14. As set forth above, there is clear reason to believe that claimed materials are clearly taught by JP-11-060833. There is a clear relationship between the seal initiation temperature of the polymer and the comonomer content. Since a low comonomer content is shown in the examples, it would have been obvious to one having ordinary skill in the art to have increased the comonomer content within the scope of the disclosure 1-15%, in order to decrease the seal initiation temperature of the polymer.

15. The appellants argue that the claims 1, 6-11, 14-19, 24, 25, 28-30, 33, 35-38, and 41-42 are not obvious over JP-11-060833 and EP 0 669 348 under 35 U.S.C. 103(a). This combination of references merely builds upon the previous rejections. It merely provides motivation to produce multilayer structures.

For the above reasons, it is believed that the rejections should be sustained.

Application/Control Number: 09/810,956
Art Unit: 1773

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Respectfully submitted,

D. Lawrence Tarazano
Primary Examiner
Art Unit 1773

A stylized handwritten signature consisting of a large 'D' followed by a vertical line and a 'T'.

dlt
July 11, 2005

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